

## *DESMANTHUS VIRGATUS* (FABACEAE): NEW TO LOUISIANA

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### ABSTRACT

*Desmanthus virgatus* (L.) Willd. is documented as occurring in Caddo Parish, Louisiana, outside of its native range, and is considered to be naturalized.

**KEY WORDS:** *Desmanthus virgatus*, naturalized, Fabaceae, Louisiana.

We recently discovered a population of *Desmanthus virgatus* (L.) Willd., also known as Wild Tantan, in a vacant lot in Shreveport, Louisiana (Figs. 1, 2) and report it here as the first known occurrence of the species in the state.

**Voucher.** Louisiana. Caddo Parish: Shreveport, vacant lot at Line Avenue and Tree Lane, 32° 27' 09.23" N, 93° 44' 45.42" W, ca. 53 meters elevation, 14 Sep 2011, *MacRoberts & MacRoberts 8919* (LSU, LSUS, TEX).

The native range of *Desmanthus virgatus* is south Texas, Florida, Mexico, Central America, South America, and the Caribbean (Turner et al. 2003; Kartesz & Meacham 2005; NatureServe 2011; USDA Plants 2011; Tropical Forages 2011). The closest known location of the species to the Louisiana locality is Robertson Co., Texas (Turner et al. 2003) about 320 km southwest. Whether the species has been brought into this area by human activity or is spreading eastward because of climate warming is a matter of conjecture (Chen et al. 2011). It is apparently widely used in agronomy as a food plant for grazing ruminants and has been introduced around the world.

The location where *Desmanthus virgatus* was found is a vacant lot, which in our memory has never had a building on it. Dozens of *D. virgatus* plants were concentrated in an open area (ca. 50 square meters) mainly between sidewalk and street where they sprawled across the sidewalk and grew over the gutter into the street. The area is occasionally mowed, which may have assisted the species because of its sprawling and procumbent habit. Associated species include *Cenchrus incertus*, *Cynodon dactylon*, and *Paspalum notatum*.

According to D.T. MacRoberts (1984, 1989), Riddell (1852: 748) listed *Desmanthus virgatus* as *Darlingtonia glandulosa* DC. for Louisiana but MacRoberts considered the report questionable, presumably because there appeared to be no voucher or if there is, its whereabouts is unknown. Thomas and Allen (1998) excluded the Riddell report of *Desmanthus virgatus* from Louisiana because a specimen could not be located in the state herbaria. We have not found a record of the specimen in searches of online databases. Unfortunately, the fate of Riddell's specimens is not known in any detail and many have been scattered among various herbaria both in the United States and Europe (Ewan 2005).

### ACKNOWLEDGEMENTS

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### LITERATURE CITED

- Chen, I-Ching, J.K. Hill, R. Ohlemuller, D.B. Roy, and C.D. Thomas. 2011. Rapid range shifts of species associated with high levels of climate warming. *Science* 333: 1024–1026.
- Ewan, J.A. 2005. Notes on Louisiana botany and botanists, 1718-1975. *Sida* 21: 2275–2296.
- Kartesz, J.T. and C.A. Meacham. 2005. Synthesis of North American flora. Version 2.0. Biota of North America Program, Chapel Hill, North Carolina.
- MacRoberts, D.T. 1984. The vascular plants of Louisiana. *Bull. Mus. Life Sciences* 6: 1–165.
- MacRoberts, D.T. 1989. A documented checklist and atlas of the vascular flora of Louisiana. *Bull. Mus. Life Sciences* 8: 257–536.
- NatureServe. 2011. NatureServe Explorer. <<http://www.natureserve.org/explorer/>>
- Riddell, J.L. 1852. *Catalogus florae Ludovicianae*. *New Orleans Medical and Surgical Journal* 8: 734–754.
- Thomas, R.D. and C.M. Allen. 1998. *Atlas of the Vascular Flora of Louisiana*. Vol. 3. Louisiana Dept. of Wildlife and Fisheries, Natural Heritage Program. Baton Rouge.
- Tropical Forages. 2011. *Desmanthus virgatus*. <[http://www.tropicalforages.info/key/Forages/Media/Html/Desmanthus\\_virgatus.htm](http://www.tropicalforages.info/key/Forages/Media/Html/Desmanthus_virgatus.htm)>
- Turner, B.L., H. Nicols, G.C. Denny, and O. Doron. 2003. *Atlas of the Vascular Plants of Texas*. *Sida, Bot. Misc.* 24: 1–888.
- USDA, NRCS. 2011. The PLANTS Database. National Plant Data Team, Greensboro, North Carolina. <<http://plants.usda.gov>>



Figure 1. *Desmanthus virgatus*, sprawling over culvert cover in Shreveport, Louisiana



Figure 2. *Desmanthus virgatus*, details of Shreveport plants.